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Awareness and Vulnerability to HIV/AIDS among Young Girls

Badariah Mohd Saad^{a,*}, Geetha Subramaniam^a, Peck-Leong Tan^b

^a*Faculty of Business Management*

^b*Arshad Ayub Graduate Business School*

Universiti Teknologi MARA, Shah Alam 40450, Malaysia

Abstract

This paper focuses on the awareness of HIV/AIDS among secondary school girls. Findings show that all the respondents have heard about HIV/AIDS. However, their knowledge and understanding on how it is transmitted is vague as less than one fifth know that HIV/AIDS can be transmitted through breast feeding and only 54 percent know that it can be transmitted through blood, drug injection and bodily fluid. Furthermore, 80 percent of respondents believe to be engaged in a relationship in the near future. This may possibly place them in the high risk group who are vulnerable to the HIV/AIDS infection.

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1. Introduction

The AIDS pandemic is one of the greatest and most devastating plagues in the history of the world. Throughout the world, young people are at the centre of the HIV/AIDS epidemic. Their behaviour, the extent to which their rights are protected, and services and information they receive determine the quality of life of millions of people. Young people are predominantly vulnerable to HIV infection. They also carry the burden of caring for family members living with HIV/AIDS. Around the world, AIDS is

* Corresponding author. Tel.: +6-012-326-2586.
E-mail address: bada@salam.uitm.edu.my.

shattering young people's opportunities for a healthy adult life. Nevertheless, it is young people who offer the greatest hope for changing the course of the epidemic.

In South Asia and South-East Asia, 40% of all young people living with HIV are young women, and the rate of HIV infection among girls is rapidly outstripping the rate among boys. An estimated 6,000 young people are infected every day which translates to one person in every 14 minutes. The majority of these new cases are among women and girls. In Malaysia, there is an average of two people below the age of 19 years who are infected with HIV every day (Entaban & Yee, 2010).

Kamarulzaman (2013) has reported that although men still make up the bulk of cumulative HIV cases in Malaysia, HIV infection among males has been declining relatively since 2003. However, new HIV infection among females is doing the opposite. Females now account for around 21% of newly infected persons in 2011 as compared to being barely as low as 5% a decade ago. This is even more troubling when we take into account that close to 90% of HIV infections among women are related to heterosexual transmission. Women around the world over bear the disproportionate burden of the HIV/AIDS epidemic. There are too many women who are becoming susceptible to HIV infection or if they are HIV positive, are unnecessarily and unfairly neglected.

There has been a reduction in the number of newly infected HIV persons from 6,120 cases in 2005 to 3,090 cases in 2010 after the successful implementation of the National Strategic Plan on HIV/AIDS Malaysia 2006-2010. Although the number of new cases have halved, Malaysia now faces an increasing population of HIV positive survivors. There are over 70,000 people living with HIV and more than 70% are of Malay Muslim origin (Malaysia United Nations General Assembly Special Session, 2010 as cited in Wan Zaidi, 2012).

2. Literature review

According to Smith (2002), in her study about HIV/AIDS and gender in Africa, HIV/AIDS is one of the major obstacles to achieving the 2015 development targets in Africa, and it is now the leading cause of death. Women's limited economic options and relative powerlessness may force them into sex work in order to cope with household economic crisis. This exposes them to HIV infection and they in turn will transmit HIV to their clients. Young girls are particularly vulnerable to HIV infection because of intergenerational sexual relationships, violence, and limited access to information. The HIV/AIDS epidemic has been fuelled by gender inequality. Unequal power relations, sexual coercion, and violence are a widespread phenomenon faced by women of all age group, and has an array of negative effects on female sexual, physical and mental health. HIV/AIDS infection reveals the disastrous effects of discrimination against women on human health, and on the socio-economic structure of society. New studies reveal extremely high levels of infections among young girls, which are higher than those for boys. This is mainly because of the fact that at young age, boys have sex with girls of similar age, while girls have relations with older men, who are more likely to be infected (Gregson et al., 2002).

Ghosh et al., (2009) in their report, explored how vulnerability to HIV/AIDS applies to women in the reproductive age range living in the slum areas of Delhi and Hyderabad. This was greatly attributed to their precarious socio-economic conditions and low AIDS awareness. The women cited lack of education, low empowerment in expressing and accessing information related to sexual matters and poverty as key factors to vulnerability.

Momoh et al., (2006) in their study of school age girls' awareness in Nigeria, showed a moderate level of awareness among female undergraduate students, including other specific objectives of age, level of study and marital status. Gupta (2002) asserts that out of every 23 infected people, 13 infected are women, and this gender gap is especially pronounced among those who are younger than 25 years. According to AVERT (2006) survey on HIV/AIDS in Nigeria in 2003, 3.3 million were living with HIV,

of these 1.9 million (57%) were females. Females had lower awareness of HIV compared to their male counterparts. Arowojolu (2002) in a study on sexuality, contraceptive choice and AIDS awareness, discovered that women were more likely than men to have relationships with older partners, for monetary gains, maturity and understanding by older partners, as well as security. It was equally discovered that 60% had two or more current sexual partners.

In India, McManus and Dhar (2008) in their study of knowledge, perception and attitude of urban adolescent school girls towards HIV in South Delhi, found that there was good awareness about the modes of HIV transmission and prevention among adolescent girls. Despite that, “there is an immense need to implement gender-based sex education regarding STIs, safe sex options and contraceptives in schools in India” to create awareness among the school going girls. Ailicky et al., (2013) in his study on HIV knowledge among high school students in Turkey, revealed a significant gender difference in AIDS knowledge with females being more knowledgeable than males, particularly in the areas concerning HIV/AIDS treatment and prevention. The internet and media, for instance television and radio, were cited as the largest sources of information regarding HIV/AIDS.

In a study conducted by the UNICEF in Eastern and South Africa released in 2009, the risk of becoming infected by AIDS is “disproportionately higher for girls and young women. The regional HIV prevalence among young women aged 15 to 24 years is 4.8 percent, which is two and a half times higher than among men of the same age”. The highest increase in prevalence occurs when young women start engaging in regular sexual relationships. In Lesotho and Swaziland, population-based survey data show a HIV prevalence of around 6 percent among adolescent girls aged 15 to 17. This goes up to nearly 30 percent in Lesotho and over 40 percent in Swaziland among young women aged 23 to 24. However, it is seen that adequate information can change attitudes and behaviour towards HIV markedly. Evidence shows that adolescents and young people are less likely to be vulnerable to HIV when they are offered relevant gender-sensitive prevention information, skills and services in an enabling and protective environment. The much lower infection rate among adolescent girls is a promising sign for prevention efforts in comparison to married women. This age group provides a ‘window of opportunity’ for halting the spread of HIV infection if younger girls are empowered with life skills and provided with a protective family and community environment. However, the proportion of young people aged 15 to 24 years with comprehensive knowledge of HIV prevention is low. Comprehensive knowledge is a combination of 5 indicators: knowledge of 2 modes of transmission and 3 misconceptions. The regional average of such knowledge now stands at 41 percent for men and 33 percent for women. Across the countries, enormous variations occur, ranging from 4 percent of young women with comprehensive knowledge of HIV prevention in Somalia, to 65 percent in Namibia.

National Women and Girls HIV/AIDS Awareness Day 2013 in the USA, reported on some recent findings of HIV infection. In 2011, women and adolescent girls (aged 13 and older) accounted for 21% of the estimated 49,273 new diagnoses of HIV infection in the United States. Black, Hispanic/Latino, and white women represented 97% (9,901) of estimated new diagnoses of HIV infection among all women in 2011. Among a total of 10,270 new HIV diagnoses among women and adolescent girls, 86% of HIV infections were attributed to heterosexual contact and 14% to injection drug use. The Centre for Disease Control and Protection estimated that 279,100 women and adolescent girls were living with HIV at the end of 2009 and that 15% of those did not know that they were infected. The data shows that black and Hispanic/Latino women and girls are more affected by HIV and AIDS. This is not directly related to race or ethnicity, but rather to other social factors like higher rates of HIV and other sexually transmitted diseases (STDs) in communities of colour, limited access to high-quality health care, poverty, stigma, fear, and discrimination. Other than that, having unprotected sex, using drugs and sharing equipment, sexual abuse which may result in the use of drugs as a coping mechanism. The emotional effects of sexual

abuse may result in women finding it difficult to refuse unwanted sex, exchanging sex for drugs, or engaging in risky sexual behaviours.

The United Nations (UN), in its briefing paper on Youth: HIV/AIDS related matters, brought out the following information regarding youth and HIV infections:

- In 2008, young people accounted for 40 percent of all new global HIV infections in people aged 15 years and older.
- Among youth living with HIV, 80 percent, or 4 million people, live in sub-Saharan Africa, 70 percent of whom are female.
- The Southern and South-Eastern Asian Regions have the second highest HIV burden, with an estimated 3.8 million people. Of the 280,000 people newly infected in this region in 2008, almost one-third were aged 15 to 24.
- Infection rates among young people have decreased from 45 to 40 percent of all new infections in previous years.
- HIV prevalence trends between 1990 to 2008 in 16 countries have dropped among youth aged 15-24 and declined 25 percent or more in 15 out of 21 countries most affected by HIV.
- HIV prevalence among young women attending antenatal clinics is declining in some countries in Africa.

According to the UN, the AIDS epidemic poses one of the most formidable challenges to the world at large. In 2008, young people accounted for 40 percent of all new HIV infections in people aged 15 years and older. Of the 33.4 million people living with HIV around the world, 4.9 million are between the ages of 15 and 24. The UN advises that programs and resources must focus on youth who engage in risky behaviours, including injecting drugs, selling sex, and having unprotected sex, particularly vulnerable youth and young women as well.

In line with the UN report, Despa (2013) reported that, Romania had a record of 17,212 people infected with HIV/AIDS, of which 9,866 (57.3%) are children aged 0-14 years and 7,346 (42.7%) are adults above 14 years old. It shows that not only youth but children below 14 years of age are also at a higher risk of contracting HIV/AIDS compared to adults who are 14 years and above.

3. Methodology

To obtain a better understanding of the development of the epidemic among young girls in Malaysia, this paper focuses on the awareness of HIV/AIDS among secondary school girls in the state of Selangor and Kelantan, Malaysia. These two states were selected because the state of Selangor represents urban population and the state of Kelantan represents suburban population. Using convenience sampling, two secondary schools were chosen, one from the state of Selangor and the other one from the state of Kelantan. Awareness and vulnerability to HIV/AIDS among young girls were measured through the knowledge of how HIV/AIDS is transmitted and its preventive measures. Furthermore, this paper also examines the socio- economic factors and behaviour/lifestyle that may lead them to be in the high risk group of HIV/AIDS. In this study, 240 questionnaires were distributed to secondary school girls between the ages of 16 to 19 years but only 194 completed questionnaires were usable. Prior to the survey, a pre-test was conducted to assess the validity of the questionnaire.

4. Findings

This section discusses findings on respondents' behaviour towards medically related activities and deviant activities (such as smoking, drinking alcohol and going to pubs/parties) and respondents'

perception of themselves and their near future plan. This is followed by the awareness and knowledge of young girls about HIV/AIDS.

Table 1 shows the background of these respondents. A quarter of these respondents are 16 to 17 years old and the remaining are 18 to 19 years old. The majority of them are from the Malay ethnic group. Most of them are from middle sized families with less than five siblings. One third of them are the eldest child and only about one fifth are the youngest child in their family. About two thirds of these respondents' parents obtained no more than secondary school education and hence, the majority of these families earn less than RM2000. More than 90 percent of these respondents live with their parents. Finally, the sample size is roughly equally divided between urban and suburban areas.

Table 1. Background of respondents

	Percentage	N
Age		
16 to 17 years old	27.8	54
18 to 19 years old	72.2	140
Ethnicity		
Malay	75.3	146
Non-Malay	24.7	48
Total Siblings		
0 to 2 siblings	38.1	74
3 to 5 siblings	45.4	88
6 or more siblings	16.5	32
Position Among Siblings		
Eldest Child	33.5	65
In between	49.5	96
Youngest	17.0	33
Father's Highest Education Obtained		
Secondary and below	64.9	126
Diploma, Degree or Post Graduate	35.1	68
Mother's Highest Education Obtained		
Secondary and below	68.0	132
Diploma, Degree or Post Graduate	32.0	62
Family's Monthly Income		
Less than RM1000	30.4	59
RM1000 to RM2000	27.3	53
RM2000 to RM5000	27.3	53
above RM5000	14.9	29
Current Living Arrangements		
Not living with parents	8.8	17
Living with parents	91.2	177
Location		
Urban	51.5	100

Suburban	48.5	94
TOTAL	100.0	194

Table 2 shows that only one third of the total respondents attend at least one medical check up per year. Furthermore, less than 10 percent attend at least one specific health screening per year. This may indicate that these young girls are very healthy and thus do not need any medical check up or health screening. However, this may also indicate naivety or ignorance on their part towards the importance of health/medical check up. Nevertheless, more than half of these young girls do attend at least one health talk a year. In terms of deviant behaviour, only less than one tenth of these young girls report that they are involved in either smoking, drinking alcohol, drugs or going to pubs/parties once a month. Likewise, slightly more than 10 percent of them reported that they have low self image. We measure self image by asking respondents four questions on their perception of their looks, physical appearance, self acceptance and self performance.

Table 2. Behaviour towards medically related activities, deviant behaviour/activities, and perception of own self image

	Percentage	N
Attending at least one medical check up per year		
Yes	32.5	63
No	67.5	131
Attending at least one health talk per year		
Yes	52.6	102
No	47.4	92
Attending at least one health screen per year		
Yes	7.2	14
No	92.8	180
Participate at least once in activities such as smoking, drinking alcohol, taking drugs or going to pubs/parties in a month		
Yes	18.0	35
No	82.0	159
Perception on own self image		
High self image	87.6	170
Low self image	12.4	24
TOTAL	100.0	194

We also asked these young girls what they will do in four years time. Table 3 shows that more than half of these girls think that they will get married and less than half of them also think that they are likely to have children in the next four years. Furthermore, nearly four fifths of these young girls perceive that they are likely to be involved in a steady relationship in the near future. Therefore, the awareness and knowledge of HIV/AIDS is very important if they were to have a steady relationship with the opposite sex or even have children in the near future.

Table 3. Likely activities in the next four years

	Percentage	N
Get married		
Likely or very likely	55.2	108
Unlikely or very unlikely	44.8	87
Have a child/children		
Likely or very likely	46.9	91
Unlikely or very unlikely	53.1	103
Have a steady relationship with someone		
Likely or very likely	82.0	159
Unlikely or very unlikely	18.0	35
TOTAL	100.0	194

Their awareness and knowledge of HIV/AIDS particularly in terms of prevention and transmission of HIV/AIDS is shown in Table 4. All respondents acknowledge that they have heard about HIV/AIDS and know that HIV/AIDS is caused by virus. However, the knowledge about the transmission of HIV/AIDS is limited. More than four fifths of them know that HIV/AIDS is transmitted through blood or drug injection but only 70 percent of them know that HIV/AIDS is transmitted through bodily fluid such as semen and vaginal fluid. Furthermore, less than one fifth of them know that HIV/AIDS can be transmitted through breast feeding. It is alarming that only slightly more than half know that HIV/AIDS can be transmitted through the three common ways - blood, drug injection and bodily fluid. On the contrary, 63 percent of these young girls believe at least one of the many myths that HIV/AIDS is spread through saliva, tears, mosquito bite, urine or even sharing of food. This may indicate that their knowledge of HIV/AIDS transmission is not comprehensive to protect them from the risk of HIV/AIDS infection.

Table 4. Awareness and knowledge of HIV/AIDS

	Percentage	N
Heard about HIV/AIDS	100.0	194
	93.3	181
Know that HIV is caused by virus		
Knowledge on how HIV/AIDS can be transmitted		
Know that HIV can spread through blood	89.2	173
Know that HIV can spread through semen or vaginal fluid	69.1	134
Know that HIV can spread through drug injection	84.5	164
Know that HIV can spread through breast feeding	19.1	37
Know that HIV can spread through blood, semen/vaginal fluid and drug injection only	54.1	106
Know that HIV/AIDS is spread by all four ways above - blood, semen or vaginal fluid, drug injection and breast feeding	14.4	28
Believe at least one myth about how HIV can spread. For example, through saliva, tears, mosquito bite, urine, and sharing of food	62.9	122

Table 4 also shows the knowledge of these young girls on how to prevent infection of HIV. More than four fifths of them believe HIV/AIDS can be prevented by avoiding multiple sexual partners but only three fourths of them believe that staying faithful to one partner will prevent HIV infection. It is interesting to observe that only slightly more than half of these young girls believe HIV/AIDS can be prevented by using condoms. Less than 10 percent of these girls know that HIV/AIDS can be prevented if they stay faithful to one sexual partner or use condoms. It's not only that these girls do not have complete knowledge about prevention measures of HIV/AIDS but they also believe the myth that HIV/AIDS can be prevented if they have a healthy diet. This is a cause of concern because more than 80 percent of these girls believe that they will be involved in a steady relationship in the very near future.

Cross tabulation analysis of knowledge of transmission against preventive measures of HIV/AIDS by various demographic variables was done. The significant results are as shown below:

- Girls in suburban areas are two times more likely to know all the three common ways of HIV/AIDS transmission compared to their counterparts in the urban area (statistically significant at 1 percent).
- Malay girls are twice more knowledgeable in how HIV/AIDS can be transmitted compared to non-Malay girls at 5 percent significance level.
- Girls who attended health screening at least once a year are half more likely to know how HIV/AIDS is transmitted compared to those who do not attend health screening. However, this is only significant at 10 percent significance level.
- Two thirds of girls from poorer families (income less than RM1000 per month) know all three ways of how HIV/AIDS is transmitted compared to only 55 percent of girls from richer families (income more than RM5000 per month). This is a significant difference at 1 percent.
- There is no difference in knowledge of transmission between those with low and high sense of self image.
- There is also no statistical difference in knowledge of transmission between those who are likely to get married or to involve in a steady relationship with girls who are unlikely to get married or involve in a steady relationship in the near future.
- Older girls (18-19 years old) are two times more likely than younger girls in knowing all three preventive measures of HIV/AIDS at 1 percent significance level.
- Those who are more likely to get involved in a steady relationship with someone in the future are statistically more knowledgeable about all the three preventive measures compared to their counterparts.
- All other demographic variables mentioned in Table 2 and Table 3 do not show any statistical difference of knowledge in preventive measures.

*(Details of cross tabulation analysis can be provided upon request)

5. Conclusion

Despite the fact that all the respondents have heard about HIV/AIDS but not having a comprehensive knowledge about how it is being transmitted may possibly place them in the high risk group who are vulnerable to the HIV infection. Evidence has shown that sex education helps in containing the spread of HIV by delaying the onset of sexual activity and encouraging safer sexual behavior. Thus, in order to lower the HIV/AIDS prevalence rate, level of education, specifically, sex education, that tackles the root cause of the problem should be emphasised at an early age. It is clear that prevention, care and treatment campaigns have to fundamentally changed and adapted to the new scenario if the HIV/AIDS epidemic in Malaysia is to be ultimately stabilised.

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